STN:Search History Report

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=> d his

     (FILE 'HOME' ENTERED AT 08:45:26 ON 23 NOV 2008)

     FILE 'MEDLINE, SCISEARCH, CAPLUS, BIOSIS' ENTERED AT 08:45:45 ON 23 NOV
     2008
L1       102631 S VEGF? OR VEGF-165 OR VEGF1? OR VEGF1-165 OR VEGF (2W) 165
L2       200757 S CARDIOMYO?
L3          761 S L1 (L) L2
L4          326 DUP REM L3 (435 DUPLICATES REMOVED)
L5           54 S L4 AND PY<=2002
L6           12 S L5 AND (PLASMID? OR VECTOR? OR VIRUS?)
L7           12 SORT L6 PY
                E LEGUENS RUBEN?/AU
                E LAGUENS RUBEN?/AU
L8           50 S E1
L9           11 S L8 AND L2
L10           4 DUP REM L9 (7 DUPLICATES REMOVED
```

Print selected from Online session

L7 ANSWER 7 OF 12 MEDLINE on STN
TI Entrance in mitosis of adult cardiomyocytes in ischemic pig hearts after **plasmid**-mediated rhVEGF165 gene transfer.
SO Gene therapy, **(2002 Dec)** Vol. 9, No. 24, pp. 1676-81.
Journal code: 9421525. ISSN: 0969-7128.
AU Laguens R; Cabeza Meckert P; Vera Janavel G; Del Valle H; Lascano E; Negroni J; Werba P; Cuniberti L; Martinez V; Melo C; Papouchado M; Ojeda R; Criscuolo M; Crottogini A
AB Replacement of the cell loss occurring after acute myocardial infarction has been proposed as a potential treatment to prevent heart remodeling and failure. On account that **cardiomyocytes** express **VEGF** receptors and that **VEGF** triggers mitogen-activated protein kinases, we investigated if **VEGF** gene transfer may induce **cardiomyocyte** replication. In a pig model of chronic myocardial ischemia achieved by Ameroid occlusion of the left circumflex coronary artery, we observed that direct intramyocardial injection of a **plasmid** encoding human **VEGF**(**165**) induced a several-fold increase in **cardiomyocyte** mitotic index and in the number of **cardiomyocyte** nuclei per unit volume as compared with pigs receiving **plasmid** devoid of gene. Despite images of conventional cytokinesis were not observed, the fact that caryokinesis is an obligatory step for cell division suggests that our finding may contribute to the issue of heart regeneration and may potentially widen the therapeutic spectrum of **VEGF** gene transfer.